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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/867,629	05/31/2001	Yoshiyuki Asayama	209252US0	7671
22850	7590	12/08/2003		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER NORDMEYER, PATRICIA L				
ART UNIT 1772				
PAPER NUMBER 15				
DATE MAILED: 12/08/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.

2018

Office Action Summary

Application No.

09/867,629

Applicant(s)

ASAYAMA ET AL.

Examiner

Patricia L. Nordmeyer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-14 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-14 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 12.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Withdrawn Rejections

1. The 35 U.S.C. 103 rejections of claims 1 – 20 in Paper #11, Pages 3 – 9, Paragraphs 9 – 11 are withdrawn due to Applicant's amendments and arguments in Paper #14.

New Rejections

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3 – 14 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norlander et al. (WO 00/14333) in view of Sandstrom et al. (USPN 6,379,497).

Norlander et al. disclose a molding base paper used for packing food items and industrial goods (Page 4, lines 1 – 3) containing a low density bulk layer, which has a density between 0.05 g/cm³ and 0.3 g/cm³ (Page 4, lines 12 – 16), with a secondary layer laminated one at least one side (Page 4, lines 26 – 27) having a higher density of 0.3 to 1.5 g/cm³ (Page 4, lines 20 – 24). The base paper has a basis weight of 0.005 g/cm² and 0.05 g/cm² (Page 4, lines 26 – 28). However, since the basis weight is a reciprocal relationship between the thickness and the density of the bulk and secondary layers, one of ordinary skill in the art would recognize that it

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would be obvious to increase the thickness of the layers to get the desired overall basis weight of base paper. The low density bulk layer is formed from either chemi-thermomechanical pulp or thermomechanical pulp (Page 5, lines 11 – 13). More than one secondary layer may be added to the laminate (Page 6, lines 1 – 3) and used as a crack prevention layer, and since the layer has a greater tensile strength than the bulk layer (Page 5, lines 18 – 19) and elongation at break of 5.3% (Page 20, Table 2) at a smaller thickness, it would be obvious to one of ordinary skill in the art that by increasing the thickness of the paper, the break at elongation would be greater than 6% and the basis weight would be between 50 to 150 g/m². To further reinforce the strength of the base paper, surface layers of synthetic resins are coated on the surface, where the resins are chosen from polyethylene, polypropylene, polyethylene vinyl alcohol co-polymer, polyvinyl alcohol and cellulose esters (Page 8, lines 23 – 28). As shown by the Table 4 on page 23, Table 5 on page 26 and Table 6 on page 28, the tensile strength of the base paper is greater than 2.0 kN/m, the elongation at break is at 1.5% and compression stress is in the range of 1 to 10 Mpa. However, Norlander et al. fails to disclose the synthetic resin containing a pigment chosen from the group of calcium carbonate, kaolin, clay, talc, titanium oxide and plastics.

Sandstrom et al. teaches a multi-layer paperboard with a synthetic resin is coated on both sides (Column 11, lines 54 – 57 and Column 12, lines 31 - 34) which may include a pigment selected from variety of materials including clay, talc, calcium carbonate (Column 18, lines 30 – 35) and kaolin (Column 18, line 6), where the resin is selected from the containing polyethylene, polypropylene, polyethylene terephthalate, methyl cellulose, carboxymethyl cellulose acetate copolymer (Column 12, lines 34 – 45) and polyvinyl alcohol (Column 18, lines 13 – 26) for the

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purpose of forming a paperboard material into containers where the paperboard does not lose any of its integrity while giving it a desired look through the use of a variety of pigments coated on the surface.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the pigments in the synthetic resin layer in Norlander et al. in order to form a paperboard material into containers where the paperboard does not lose any of its integrity while giving it a desired look through the use of a variety of pigments coated on the surface as taught by Sandstrom et al.

Response to Arguments

4. Applicant's arguments with respect to claims 3 – 14 and 21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Nordmeyer whose telephone number is (703) 306-5480. The examiner can normally be reached on Mon.-Thurs. from 7:00-4:30 & alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on (703) 308-4251. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Patricia L. Nordmeyer
Examiner
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pln


HAROLD PYON
SUPERVISORY PATENT EXAMINER

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11/19/03